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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,845	01/29/2004	Sergio Kolor	030603	7600
23696 7590 02/23/2007 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER KHAN, IBRAHIM A	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		02/23/2007	ELECTRONIC	

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If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/768,845	<b>Applicant(s)</b> KOLOR ET AL.	
	<b>Examiner</b> Ibrahim A. Khan	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements submitted on August 04, 2005 has been considered by the Examiner and made of record in the application file.

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 112*

3. Claims 4, 16 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no definition or explanations as to what the applicant is claiming in the specifications. Even though the applicant mentions a network comprising physically coupled transceivers in paragraph [0025], it is vague and indefinite.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-8, 10-13, 15-20, 22-25, 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by **Gopalakrishnan (US 20020183064)**.

Consider **claim 1, 13 and 25**, Gopalakrishnan discloses a method for transmitting data in a code division multiple access (CDMA) communication network (*abstract*), comprising:

allocating a common Walsh code to a group of transceivers (*page 1 and 2 paragraphs 0010 - 0012* where Gopalakrishnan discloses allocating Walsh codes for signaling, protocol information and voice and data services) ;

allocating a respective, different long code to each transceiver in the group (*page 1 and 2 paragraphs 0010 – 0012* where Gopalakrishnan discloses allocating user specific long codes);  
and

time-multiplexing transmission of the data to the transceivers in the group by applying the common Walsh code and the respective long code of each transceiver to data packets directed to the transceivers so as to form multiplexed data packets, and transmitting the multiplexed data packets in sequence over the network to the group of transceivers (*page 1 and 2 paragraphs 0010 – 0012* where Gopalakrishna discloses that the long code is combined with

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Walsh codes and transmitted to the mobile stations. The initial Walsh spreading is done to enable the BS to differentiate between the categories of data, and the subsequent long code spreading is done to differentiate between users)

Consider **claim 7 and 19**, Gopalakrishna discloses a method for transmitting data in a code division multiple access (CDMA) communications network (*abstract*), comprising:

allocating a plurality of different Walsh codes to respective sets of transceivers (*page 1, 2 and 4 paragraphs 0010 – 0012 and 0040 where* .Gopalakrishna discloses that different Walsh codes are allocated to mobile stations to distinguish the categories of data that is transmitted on the chaennl);

allocating a respective, different long code to each of the transceivers in the sets (*page 1 and 2 paragraphs 0010 – 0012 where* Gopalakrishnan discloses allocating user specific long codes; and

for each Walsh code, time-multiplexing transmission of the data to the transceivers in the respective set by applying the Walsh code and the respective long code of each transceiver of the respective set to data packets directed to the transceivers so as to form multiplexed data packets, and transmitting the multiplexed data packets in sequence over the network to the sets of transceivers (*page 1 and 2 paragraphs 0010 – 0012 where* Gopalakrishna discloses that the long code is combined with Walsh codes and transmitted to the mobile stations. The initial Walsh spreading is done to enable the BS to differentiate between the categories of data, and the subsequent long code spreading is done to differentiate between users).

Consider **claim 3, 15 and 27** and as applied to claim 1, 13 and 25 respectively, Gopalakrishnan disclose wherein the transceivers comprise mobile transceivers in a cellular network (*abstract, page 1 paragraph 0006*).

Consider claim **5, 17 and 29** and as applied to claim 1, 13 and 25, wherein the transceivers are configured to receive the multiplexed data packets at a common data transfer rate (*see page 1 paragraph 0005, page 3 paragraph 0024*)

Consider claim **6, 18 and 30** and as applied to claim 1, 13 and 25, wherein the transceivers are adapted to communicate using one or more voice channels and one or more data channels, and wherein the common Walsh code defines one of the data channels *page 1, 2 and 4 paragraphs 0006, 0010 – 0012 and 0040*)

Consider claim **8 and 20** and as applied to claim 7 and 19, Gopalakrishnan discloses wherein allocating the plurality of different Walsh codes comprises measuring a voice-channel power used by a central transmitter for transmitting voice channels to the transceivers, and allocating and de-allocating at least one of the different Walsh codes in response to at least one of an excess power available to the central transmitter above the voice-channel power, an additional Walsh code available to the transmitter, and cell site modem resources available to the transmitter (*see page 2 paragraph 0019* where Gopalakrishnan discloses the power budget for the uplink channel which is used for voice users) .

Consider claim **10 and 22** and as applied to claim 7 and 19 above, Gopalakrishnan discloses assigning each set of transceivers to two or more groups of transceivers, and assigning each group to receive the data at a different respective data transfer rate (*see page 4 paragraphs 0039-0041*).

Consider claim **11 and 23** and as applied to claim 10 and 22 above, Gopalakrishnan discloses setting, for each group, the different transfer rate in response to a radio receiving condition of the group at a central transceiver for the transceivers (*see page 3 paragraphs 0026-31, page 4 paragraphs 0039-0041*).

Consider claim **12 and 24** and as applied to claim 10 and 22 above, Gopalakrishnan discloses re-allocating a specific transceiver comprised in a first group comprised in the two or more groups to a second group comprised in the two or more groups in response to radio conditions at the specific transceiver (*see page 3 paragraph 0034-0036*).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims **2, 9, 14, 21, and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over is **Gopalakrishnan (US 20020183064)** in view of **Gopalakrishnan (US 7009949)**.

To avoid confusion the Examiner will refer to the prior art as **Gopalakrishnan A** and **Gopalakrishnan B**.

Consider **claim 2, 14 and 26** and as applied to claim 1, 13 and 25 respectively, **Gopalakrishnan A** discloses that the transceivers in the group have respective data throughput rates, and wherein transmitting the multiplexed data packets comprises identifying a specific



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transceiver in the group among the data throughput rates of the transceivers in the group, and applying the respective long code to transmit at least one multiplexed data packet to the specific transceiver (*see abstract page paragraph 0026-0031*). Gopalakrishnan A however, does not disclose identifying a specific transceiver in the group having a minimum data throughput rate. In the related art Gopalakrishnan B discloses identifying a specific transceiver in the group having a minimum data throughput rate (*abstract, column 2 lines 3-10, column 3 lines 22-46*).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Gopalakrishnan A with the teachings of Gopalakrishnan B to provide dynamic resource allocation

Consider claim **9 and 21** and as applied to claim 7 and 19, Gopalakrishnan A does not specifically disclose assigning and de-assigning at least one of the different Walsh codes to a specific receiver comprised in the transceivers in response to a data call directed to the specific receiver. In the related art Gopalakrishnan B discloses assigning and de-assigning at least one of the different Walsh codes to a specific receiver comprised in the transceivers in response to a data call directed to the specific receiver (*see column 1 lines 39-65*).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Gopalakrishnan A with the teachings of Gopalakrishnan B because of the nature of latency requirements of transmitting voice compared to transmitting data (transmitting voice requires dedicated whereas transmitting data does not)

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 20050128964  
US 20030109257  
US 6735185  
US 6229795

9. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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**Hand-delivered responses** should be brought to

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10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ibrahim A. Khan whose telephone number is (571) 270-1110. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

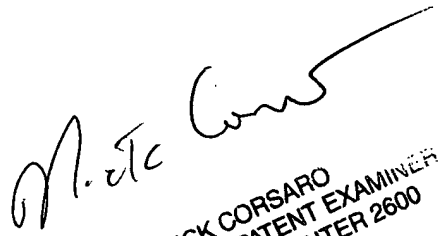
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Ibrahim A. Khan*  
I.A.K./iak

02/12/2007

  
NICK CORSARO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600